AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A peptide consisting of 18 amino acids, the peptide having the primary structure: 8 AA – Cysteine – 2 AA – Citrulline – 1 AA – Cysteine – 4 AA (SEQ ID NO:4); wherein the peptide contains a peptide turn comprising at least one citrulline residue, and
wherein said peptide is specifically recognised by rheumatoid arthritis autoimmune antibodies from patients suffering from rheumatoid arthritis; and wherein the peptide is a cyclic peptide.

2. **(Cancelled)**

3. (Previously Presented) A peptide according to claim 1 characterised in that said peptide is biotinylated.

4. (Previously Presented) A peptide according to claim 1 characterised in that said peptide is a synthetic peptide.

5.–7. (Cancelled)

8. **(Currently Amended)** A peptide according to claim 1 characterised in that the amino ~~acids~~ acid flanking the citrulline residue on the amino-terminal side of the citrulline residue is ~~are selected from~~ glycine ~~and~~ or serine, and/or the amino acid flanking the citrulline residue on the carboxy-terminal side of the citrulline residue is glycine.

9. (Previously Presented) A peptide according to claim 1 comprising the amino acid sequence:
QDTIHGHPCSXXGCRPGY (SEQ ID NO: 12) or
QDTIVGWGCDSXGCRPGQ (SEQ ID NO: 17).

10.–11. (Cancelled)

12. **(Currently Amended)** A ~~diagnostic~~ kit for use in detecting autoantibodies present in the sera of patients with rheumatoid arthritis, said kit comprising at least one peptide

according to claim 1, with said peptide ~~or antibody~~ optionally bound to a solid support.

13. **(Currently Amended)** A ~~diagnostic~~ kit according to claim 12, said kit comprising a range of peptides according to claim 1, ~~optionally in combination with antigens that constitute immunogenic determinants for other auto-immune diseases~~, wherein said peptides are attached to specific locations on a solid support ~~substrate~~.

14. (Previously Presented) A diagnostic kit according to claim 13, wherein said solid support is a membrane strip.

15.–22. (Cancelled)

23. (Previously Presented) A method for detecting antibodies present in sera from patients with rheumatoid arthritis, comprising:

a) contacting a biological sample to be analyzed for the presence of said antibodies with a peptide of claim 1, and

b) detecting the immunological complex formed between said antibodies and said peptide.

24.–27 (Cancelled)

28. **(Currently Amended)** The method of claim 23 wherein the peptide ~~has~~ consists of the amino acid sequence QDTIHGHPCSXXGCRPGY (SEQ ID NO: 12).

29. **(Currently Amended)** The method of claim 23 wherein the peptide ~~has~~ consists of the amino acid sequence QDTIVGWGCDSXGCRPGQ (SEQ ID NO: 17).